WO 98/43268 PCT/US98/05543

Claims:

5

15

20

1. A multilayer cathode backplate structure for use with a field emitter in a display panel comprising a plurality of electrodes separated by one or more patterned layers of a dielectric composition, each said patterned layer being formed by firing a thick film dielectric composition which has been patterned by diffusion patterning.

- 2. The multilayer cathode backplate structure of Claim 1 wherein the thick film dielectric composition is formed using a diffusion patterning system.
- The multilayer cathode backplate structure of Claims 1 or 2, further comprising a field emitter.
  - 4. A multilayer cathode backplate structure for use with a field emitter in a display panel comprising a plurality of electrodes separated by one or more patterned layers of a dielectric composition, each said patterned layer being formed by firing a thick film photoprintable composition which has been exposed pattern-wise to actinic radiation and developed.
  - 5. The multilayer cathode backplate structure of Claim 4 wherein said photoprintable composition is a dielectric paste.
  - 6. The multilayer cathode backplate structure of Claims 4 or 5, further comprising a field emitter.
  - 7. A multilayer cathode backplate structure for use with a field emitter in a display panel comprising a plurality of electrodes separated by one or more patterned layers of a dielectric composition each of which is formed by firing a high strength glass/ceramic tape which has been patterned.
- 8. The multilayer cathode backplate structure of Claim 7, further comprising a field emitter.